Records of the Northern Vietnamese Odonata Taken by the Expedition Members from the National Science Museum, Tokyo

6. Platystictidae, Megapodagrionidae, Lestidae and Synlestidae

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Abstract Seven species of northern Vietnamese damselflies are classified into four families, Platystictidae (1 new species and 1 new subspecies), Megapodagrionidae (1 new species and 1 species previously known from Lower Burma and Laos), Lestidae (1 common South Asiatic species), and Synlestidae (2 species previously known from Southwest China, etc.).

Key words: Odonata, Zygoptera, collection records, new species, northern Vietnam.

In the last part of this series of reports, seven species of northern Vietnamese damselflies belonging to four zygopterid families will be recorded. Of these, two platystictids are new to science, one of the two megapodagrionids is also new to science, one lestid is a common South Asiatic species, and two synlestids are previously known from Southwest China (one of the two also from Assam).

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Family Platystictidae

72. Drepanosticta vietnamica sp. nov.

(Figs. 1-2)

Specimens examined. 2

√ (holo- and paratypes), Ban A Chia, 890 m alt., Hung Nga, Muong Lay, Lai Chau Prov., 8-V-1995, M. Satô leg.

 \mathcal{J} : Abdomen 40 mm; hindwing 26 mm. A medium-sized, shining dark-coloured, slender species, not closely related to any of the hitherto known species.

Head almost deep black, labrum except for narrow anterior margin, antefrons and the base of mandible pale yellow. Anterior lobe of prothorax black with ambiguous pale spots laterally. Pterothorax (Fig. 1) almost entirely black with a single broad stripe on metepimeron and metapostepimeron as well as metasternum pale greyish yellow. Legs entirely very pale grey.

Wings hyaline, pterostigma black though its anterior side is shorter than the



Figs. 1-2. Drepanosticta vietnamica sp. nov.—1, A Head and thoracic pattern; 2, A abdominal end.

posterior side. Abdomen black, palely annulated at segments 4–7, tergite of segment 8 black with pale ventral border; segments 9 and 10 broadly pale whitish coloured on dorsum (Fig. 2).

Caudal appendages black; superior appendage incurved in its distal half, with a minute dorsal process at the middle. Inferior appendages almost of the same length as the superiors, and very sharply pointed (Fig. 2).

73. Protosticta khaosoidaoensis satoi subsp. nov.

(Figs. 3-4)

Specimen examined. 1 \(\cdot \) (holotype), Tam Dao, 960 m, Vinh Phu Prov., 21–V–1995, M. Satô leg.

Small, slender and delicate species. Although only a single female specimen is available, it comes close to the female specimens (incl. allotype) of *P. khaosoidaoensis* Asahina (1984, pp. 588–590, figs. 8–15, 39) from Chantaburi Province in eastern Thailand. However, the following differences of subspecific value are recognized:

- 1. The prothoracic dark marking is developed with a broad black area on the posterior lobe of the tergite.
- 2. The black stripe running along the thoracic metapleural suture is only weakly darkened (Fig. 3).
 - 3. The 9th abdominal segment bears a large brilliant pale bluish spot on the



Figs. 3-4. Protosticta khaosoidaoensis satoi subsp. nov., \circ . ----3, Head and thoracic pattern; 4, Distal abdominal segments, lateral.

dorsal side (see Fig. 4). Such a pale spot is completely absent in the nominotypical Thai subspecies.

Family Megapodagrionidae

74. Burmargiolestes melanothorax (Selys)

(Figs. 5-7)

Argiolestes melanothorax Selys, 1891, Annli. Mus. civ. Stor. nat. Genova, 30, pp. 500-501, "Cobapo". Burmargiolestes flavipes Fraser, 1933 b, J. Siam Soc. nat. Hist., (Suppl.), 9, pp. 120-121, "1♂, Pututi and Taweing, Laos, about 1200 m, Apr. 6 & 22, 1932".

Burmargiolestes melanothorax: Lieftinck, 1960, Mem. Soc. ent. ital., 38, pp. 235–236, fig. 5 (p. 237) σ app., "4 σ , Cobapo, 29. IX. 1988".

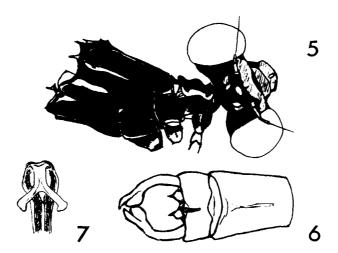
Specimen examined. 1♂, Ban A Chia, 890 m alt., Hung Nga, Muong Lay, Lai Chau Prov., 8-V-1995, M. Owada leg.

on (ad.): Body length 47 mm, abdomen 38 mm, hindwing 27 mm. Mostly deep brownish with pale brownish legs.

Head deep brownish black with ochreous frontal part as shown in Fig. 5. Prothorax black with rather ambiguous lateral stripes. Pterothorax shining black with three limited whitish streaks (Fig. 5).

Abdomen deep brownish with small pale areas at the anterior part of segments 3–8, segments 9 and 10 and appendages entirely deep brownish.

Caudal appendages entirely black, though palely pruinosed in the present male specimen. Distal part of superior appendages flattened and bilobed. The inferiors are very short, with sharply pointed apices. Penile organ as shown in Fig. 7.



Figs. 5-7. Burmargiolestes melanothorax (Selys), $\sqrt{.}$.—5, Head and thoracic pattern; 6, abdominal end; 7, distal part of penile organ.

75. Rhipidolestes owadai sp. nov.

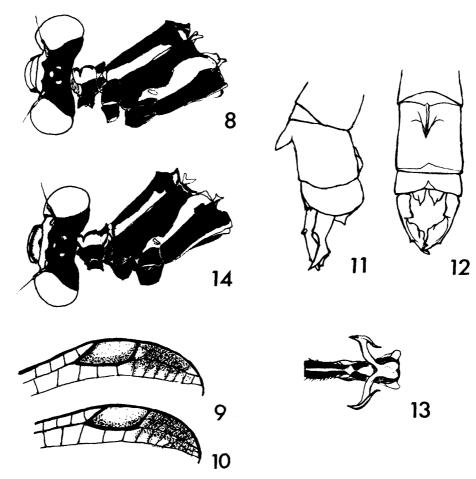
(Figs. 8-14)

Specimens examined. $1 \circlearrowleft$ (paratype), Tam Dao, 980 m alt., Vinh Phu Prov., 22–IV–1995, S. Uéno leg.; $1 \updownarrow$ (paratype), ditto, Y. Nishikawa leg.; $1 \updownarrow$ (paratype), ditto, 23–IV–1995, M. Owada leg.; $3 \circlearrowleft$, $2 \updownarrow$ (holo-, allo- and paratypes), ditto, 23–IV–1995, M. Satô leg.

otin: Abdomen 47–48 mm, hindwing 35 mm. Closely allied to *Rh. bidens* Schmidt, 1931.

Ground colour of head deep black, but the frontal parts, viz., labrum, anteand postclypeus, are entirely yellow, instead of being wholly black on labrum, gena and the upperpart of head as in *Rh. bidens*. Antennal segments brownish (Fig. 8).

Prothoracic tergite black with its lateral sides broadly yellowish. Pterothorax



Figs. 8-14. Rhipidolestes owadai sp. nov.—8, A Head and thoracic pattern; 9, A pattern of wing apex; 10, $\stackrel{\frown}{}$ the same; 11, A caudal appendages, lateral; 12, the same, dorsal; 13, penile organ; 14, $\stackrel{\frown}{}$ head and thoracic pattern.

deep black, with two usual broad stripes on the sides. Coxae black, but the distal parts of the legs are pale brownish.

Wings hyaline, veins black. Pterostigma light greyish, wing apices darkened only along the anterior margin (Figs. 9–10).

Abdomen entirely black, with a strong dorsal process on the base of segment 9 (Figs. 11–12). Superior appendage well developed, with roundly incurved distal lobe sharply pointed at the end. Adding to this, there are two pointed processes at distal 1/3 and apical 1/4. Inferior appendage inconspicuous, with short but pointed apex. Penile organ provided with conspicuously developed end-lobe (Fig. 13).

 \circ : Abdomen 40-42 mm, hindwing 33-36 mm. The colour patterns (Fig. 14) are almost the same as those of the male, but in mature females, the labrum is pale brownish tinted and the dark areas of the wing tips are somewhat reduced.

Family Lestidae

76. Lestes praemorsa decipiens Kirby

Lestes decipiens Kirby, 1893, J. Linn. Soc. London, (Zool.), 24, pp. 565–566, "♂ ♀ Ceylon".

Lestes praemorsus decipiens: Lieftinck, 1954, Treubia, 22 (Suppl.), p. 26, "Siam, Malaya, Sumatra, Billiton, Panaitan, Java, Kangean, Borneo, Mangalum".

Specimen examined. 1 $\stackrel{\circ}{+}$, Sa Pa, 1,200 m alt., Lao Cai Prov., 7–X–1995, S. Nomura leg.

A teneral female specimen was taken by Nomura. This is a widely distributed South Asiatic species and has been known from many localities in Southeast Asia.

Family Synlestidae 77. Megalestes micans Needham (Fig. 15)

Megalestes micans Needham, 1930, Zool. sin., (A), 11(1), pp. 230-231, pl. 16, fig. 11-1, "A single male from the U. S. National Museum, Graham collection, July 1925, Tsi Tsu Tang (?), Szechuen". — Asahina, 1969, Kontyû, Tokyo, 37, p. 196, figs. 11-14; 1985, Chocho, 8(10), pp. 8-10, figs. 19-22, 49, "Assam".

Specimens examined. $1 \nearrow$, Mt. Phang Si Pang, 1,950 m alt., Hoang Lien Son Mts., Lai Chau Prov., 17–V–1995, A. Saito leg.; $1 \nearrow$, Ban Khoang, 1,400 m alt., Sa Pa, Lao Cai Prov., 3–X–1995, S. Nomura leg.; 1 ?, Deo O Quy Ho, 1,750 m alt., Sa Pa, Lao Cai Prov., 16–V–1995, A. Saito leg.; $1 \nearrow$, Sa Pa, 1,550 m alt., Lao Cai Prov., 2–X–1995, S. Nomura leg.; $1 \nearrow$, Sa Pa, 1,200 m alt., Lao Cai Prov., 7–X–1995, S. Nomura leg.

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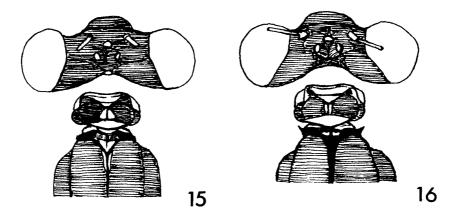


Fig. 15. Megalestes micans Needham, \mathcal{A} ; body pattern of head and thorax, dorsal. Fig. 16. Megalestes distans Needham, \mathcal{A} ; body pattern of head and thorax, dorsal.

This is one of the giant lestids, described from Szechuen (=Sichuan) by Needham (1930) based on a single male specimen. Some details of the male were added by myself in 1969, but no female has been available up to the present.

As is shown in the accompanying figure (Fig. 15), the female insect possesses characteristic yellowish patterns on the prothorax, which are similar to but more clearly developed than those of the male insect. I believe that the peculiar small yellow patches illustrated in Fig. 15 are characteristic of this species. There are a small spot at the centre of the occiput, dorsal yellowish pattern on the prothorax, and the similar one on the mesothoracic acrotergite. No spiny process exists on the acrotergite.

78. Megalestes distans Needham (Fig. 16)

Megalestes distans Needham, 1930, Zool. sin., (A), 11(1), pp. 231–232, pl. 6, fig. 10 (♂ app.), "Szechuen and Kiangsi". — Asahina, 1956, Ent. Medd., 27, p. 216, "2♂, 2♀, Suisapa, 23–31. VII. 1948"; 1969, Kontyû, Tokyo, 37, pp. 193–197, figs. 1–8.

(?) Megalestes distans: Klots, 1947, Am. Mus. Novit., (1341), p. 11, "Szechwan Prov., Tatsienlu, $2 \nearrow$, $2 \stackrel{\circ}{+}$, 14. VII. 1938 (Dean Sage, Jr.)".

This species was described by Needham from both sexes taken in Szechuen and Kiangsi Provinces. Later in 1956, I recorded two pairs from Suisapa, which were collected by the Metasequoia Expedition. Klots (1947) also recorded two

pairs from Tatsienlu, Szechwan Province, though he was not confident of his identification because of the mutilated condition of his specimens.

In this paper, I record seven males and one female for the first time from northern Vietnam.

Corrigenda

In the fifth part of this series (Bull. Natn. Sci. Mus., Tokyo, Ser. A, 23(1), pp. 17-34), "Figs. 47 and 49" (p. 34, l. 1) should be read "Figs. 68 and 69".

Acknowledgements

In finishing this series of papers where seventy-eight species of the Odonata taken from northern Vietnam were recorded, I should like to express my cordial gratitude to the survey leader Dr. Shun-Ichi Uéno for his aid in preparing this report.

References

- Asahina, S., 1956. Dragonflies from West Tien-Mu-shan, Central China. *Ent. Medd.*, 27: 204-228. Asahina, S., 1969. Notes on Chinese Odonata. II. The Odonata of Metasequoia Expedition. *Kontyû*, *Tokyo*, 37: 192-201.
- Asahina, S., 1984. A list of the Odonata from Thailand. Part III. Platystictidae. Kontyû, Tokyo, 52: 585-595.
- Asahina, S., 1985. Contributions to the taxonomic knowledge of the *Megalestes* species of continental South Asia (Odonata, Synlestidae). *Chocho*, 8(10): 2-18.
- Fraser, F. C., 1933 a. Odonata. Vol. 1. In: Fauna of British India including Ceylon and Burma. Taylor & Francis, London.
- Fraser, F. C., 1933 b. Dragonflies from Laos Country. J. Siam Soc. nat. Hist., (Suppl.), 9: 109-141.
- Kirby, W. F., 1890. A Synonymic Catalogue of Neuroptera Odonata or Dragonflies. IX + 202 pp.
- Klots, E. B., 1947. Chinese dragonflies (Odonata) in the American Museum of Natural History. Am. Mus. Novit., (1341): 1-15.
- Lieftinck, M. A., 1960. On the identity of some little-known Southeast Asiatic Odonata in European museums described by de Selys Longchamps. *Mem. Soc. ent. ital.*, 38: 229-256.
- Needham, J. G., 1930. A manual of the dragonflies of China. A monographic study of the Chinese Odonata. Zool. sin., Peiping, (A), 11(1): i-iii+1-345 [incl. 20 pls.]+1-11.
- Schmidt, E., 1931. Libellen aus Kiangsu und Tschekiang (Ostchina) nebst Beschreibung zweier neuer *Rhipidolestes* aus Tschekiang und Canton. *Konowia, Wien*, 10: 177-190.
- Selys Longchamps, Edm. de, 1891. Viaggio di Leonardo Fea in Birmania e regioni vicine. XXXII. Odonates. Annli. Mus. civ. Stor. nat. Genova, 30: 433-518.